



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,412	01/07/2002	James W. Arendt	AUS919970761US2	9333

42640 7590 09/11/2007

DILLON & YUDELL LLP
8911 NORTH CAPITAL OF TEXAS HWY
SUITE 2110
AUSTIN, TX 78759

EXAMINER

JEAN GILLES, JUDE

ART UNIT	PAPER NUMBER
----------	--------------

2143

MAIL DATE	DELIVERY MODE
-----------	---------------

09/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/042,412

Applicant(s)

ARENDT ET AL.

Examiner

Jude J. Jean-Gilles

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-16, 18-20, 23, 24, 27-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-16, 18-20, 23, 24, 27-29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/07/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Action is in regards to the Reply received on 06/18/2007.

Response to Amendment/Arguments

2. In the claims, **14-16, 18-20, 23, 24, 27-29, and 31** remain pending, and represent a method and apparatus for an "HIGHLY SCALABLE AND HIGHLY AVAILABLE CLUSTER SYSTEM MANAGEMENT SCHEME."

Applicants' arguments with respect to the independent claims have been carefully considered, but are not deemed fully persuasive. Applicants' arguments are deemed moot in view of the existing ground of rejection as explained here below. Applicants have made no amendments to the independent claims as to perhaps place them in condition for allowance.

The dependent claims stand rejected as articulated in the Previous Office Action and all objections not addressed in Applicant's response are herein reiterated.

In response to Applicant's arguments, 37 CFR § 1.11(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must show the amendments avoid such references or objections."

Applicant's Request for Reconsideration filed on 07/18/2007 has been carefully considered but is not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention:

Applicant contends that in summary, Applicant urges the Examiner to consider that Vert et al., by disclosing that application configuration information is periodically mirrored and stored to a quorum disk, which is shared by all systems within a cluster, cannot be said to fairly suggest a system such as that set forth within the claims of the present application wherein a resource group is designated as a subset of data processing systems within a cluster and wherein configuration data for a particular highly available application is replicated only within the data processing systems within that resource group. Further, Applicant respectfully urges that the teaching of Vert et al. may not be said to suggest the system, method and computer program set forth within the claims of the present application for the reasons set forth above.

It is the position of the Examiner that Vert in detail teaches the limitations of the above mentioned claims. However, in view of Applicant's remarks, the Office respectfully concludes that the applicant mischaracterizes the teachings of Vert and that the argument above is moot. Applicants have simply cherry-picked portions of Vert that teach away from the invention without taking into account the essence of the teachings of Vert. Vert teaches in fig. 3 a cluster system that contain many resource groups wherein a resource can be a member of many resource groups (see Vert, column 5, lines 18-64; see also rejection of claim 14 below).

Examiner notes that no new matter has been added and that the new claims are supported by the application as filed. However, applicant has failed in presenting claims and drawings that delineate the contours of this invention as compared to the cited prior art. Applicant has failed to clearly point out patentable novelty in view of the state of the

art disclosed by the references cited that would overcome the 102(e) anticipation rejections applied against the claims, the rejection is therefore sustained.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 14-16, 18-20, 23, 24, 27-29, and 31** are rejected under 35 U.S.C. 102(e) as being anticipated by Vert et al (Vert), Patent No. 6,360,331 B2.

Regarding **claims 14-16, 18-20, 23, 24, 27-29, and 31**, Vert discloses :

1-13. (Cancelled)

14. (Currently Amended) A method of partially replicating configuration information in a distributed database (figs 2 and 3; see database in fig. 4), comprising:

defining a subset of data processing systems within a cluster system as a resource group, wherein a data processing system may be a member of more than one resource group (column 4, lines 63-67; column 5, lines 1-17; and column 8, lines 18-23, 23, 62-67);

defining configuration data for the resource group by instantiating a configuration object containing configuration and status information for a highly available application

corresponding to the resource group and having an associated list of data processing systems within the resource group (column 14, lines 14-31); and

replicating the configuration data only on each data processing system within the resource group (column 7, lines 2-11; column 8, lines 37-52, and column 13, lines 48-61).

15. (Original) The method of claim 14, wherein the step of defining a subset of data processing systems within a cluster as a resource group further comprises:

defining a highly available application and each data processing system designated to manage the application as a resource group (column 4, lines 63-67; column 8, lines 62-67).

16. (Original) The method of claim 15, wherein the step of defining a highly available application and each data processing system managing the application as a resource group further comprises:

defining a plurality of resource groups for each highly available application within the cluster, each resource group including all data processing systems managing the corresponding application (column 4, lines 63-67; column 8, lines 62-67).

17. (Cancelled)

18. (Currently Amended) The method of claim 14, wherein the step of replicating the configuration data only on each data processing system within the resource group further comprises:

replicating the configuration object on each data processing system identified in an owners list associated with the configuration object (column 7, lines 2-11; column 8, lines 37-52, and column 13, lines 48-61).

19. (Currently Amended) The method of claim 14, wherein the step of replicating the configuration data only on each data processing system within the resource group further comprises:

replicating, on a data processing system, a configuration object for each resource group including the data processing system (column 7, lines 2-11; column 8, lines 37-52, and column 13, lines 48-61).

20. (Original) The method of claim 14, further comprising:

maintaining, on a data processing system, a configuration object for each resource group including the data processing system and no configuration objects for other resource groups (column 14, lines 14-31).

21-22. (Cancelled)

23. (Currently Amended) A computer program product in a computer usable medium (figs 2, 3, and 4), comprising:

instructions defining a subset of data processing systems within a network as a resource group, wherein a data processing system may be a member of more than one resource group (column 4, lines 63-67; column 5, lines 1-17; and column 8, lines 18-23, 62-67);

instructions defining configuration data for the resource group comprising instructions instantiating a configuration object containing configuration and status

Art Unit: 2143

information for a highly available application corresponding to the resource group and having an associated list of data processing systems within the resource group (column 14, lines 14-31); and

instructions for replicating the configuration data only on each data processing system within the resource group (column 7, lines 2-11; column 8, lines 37-52, and column 13, lines 48-61).

24. (Original) The computer program product of claim 23, wherein the instructions defining a highly available application and each data processing system managing the application as a resource group further comprise:

instructions defining a plurality of resource groups for each highly available application within the network, each resource group including all data processing systems managing the corresponding application (column 4, lines 63-67; column 8, lines 62-67).

25-26. (Cancelled)

27. (Currently Amended) A cluster multiprocessing system (figs 2, 3, and 4), comprising:

a plurality of data processing systems segregated into a plurality of resource groups, wherein each of the plurality of data processing systems may be a member of more than one resource group (column 4, lines 63-67; column 5, lines 1-17; and column 8, lines 18-23, 23, 62-67);

a plurality of configuration objects each corresponding to a resource group within the plurality of resource groups wherein each of the plurality of configuration

Art Unit: 2143

objects contains configuration and status information for a highly available application corresponding to the resource group and an associated owners list of data processing systems within the resource group (column 14, lines 14-31); and

wherein each of the plurality of configuration objects is replicated only on each data processing system within the resource group associated with the configuration object (column 7, lines 2-11; column 8, lines 37-52, and column 13, lines 48-61).

28. (Original) The cluster multiprocessor system of Claim 27, wherein a highly available application and each data processing system designated to manage the application is defined as a resource group (column 4, lines 63-67; column 8, lines 62-67).

29. (Original) The cluster multiprocessor system of Claim 28, wherein a plurality of resource groups is defined for each highly available application within the cluster, each resource group including all data processing systems managing the corresponding application (column 4, lines 63-67; column 8, lines 62-67).

30. (Cancelled)

31. (Currently Amended) The cluster multiprocessor system of Claim 27, wherein each of the plurality of configuration objects are replicated on each data processing system identified in an owners list associated with the configuration object (column 4, lines 63-67; column 8, lines 62-67).

Conclusion

5. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3719.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

August 29, 2007



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100